

[4910-13-P]

#### DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2018-0564; Product Identifier 2018-NE-23-AD; Amendment 39-

19315; AD 2018-13-03]

RIN 2120-AA64

**Airworthiness Directives; International Aero Engines Turbofan Engines** 

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain International Aero Engines (IAE) PW1133G-JM, PW1133GA-JM, PW1130G-JM, PW1127G-JM, PW1127G-JM, PW1127G1-JM, PW1124G-JM, PW1124G1-JM, and PW1122G-JM turbofan engines. This AD requires a one-time visual inspection of the engine fan hub for damage, and removal of parts if damage or defects are found that are outside the serviceable limits. This AD was prompted by reports of damage to the engine fan hub. We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
  - Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30,
  West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE.,
  Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except
  Federal holidays.

For service information identified in this final rule, contact International Aero Engines, 400 Main Street, East Hartford, CT 06118; phone: 800-565-0140; email: help24@pw.utc.com; internet: http://fleetcare.pw.utc.com. You may view this service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7759. It is also available on the internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0564.

# **Examining the AD Docket**

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0564; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations (phone: 800-647-5527) is listed above. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Kevin M. Clark, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7088; fax: 781-238-7199; email: kevin.m.clark@faa.gov.

#### SUPPLEMENTARY INFORMATION:

#### Discussion

We received information concerning damage to the engine fan hub found during an engine shop visit of an IAE PW1100G-series turbofan engine. The damage is believed to be the result of the installation of the inlet cone without using alignment pins, which might lead to bolts impacting and damaging the engine fan hub. This condition, if not addressed, could result in uncontained failure of the engine fan hub, damage to the engine, and damage to the airplane. We are issuing this AD to address the unsafe condition on these products.

## **Related Service Information under 1 CFR part 51**

We reviewed Pratt & Whitney (PW) Service Bulletin (SB) PW1000G-C-72-00-0104-00A-930A-D, Issue No. 002, dated May 31, 2018. The SB describes procedures for performing a one-time visual inspection of the inlet cone mating face and counter weight flange on the engine fan hub assembly for surface damage. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### FAA's Determination

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

#### **AD Requirements**

This AD requires a one-time visual inspection of the engine fan hub for damage, and replacement of the engine fan hub if damage or defects are found that are outside of serviceable limits.

#### Differences Between the AD and the Service Information

PW SB PW1000G-C-72-00-0104-00A-930A-D, Issue No. 002, dated May 31, 2018, only applies to PW1100G-JM engine models in service. This AD applies to all PW1100G-JM engine models certified under type certificate E00087EN. PW SB PW1000G-C-72-00-0104-00A-930A-D also excludes from its applicability certain serial numbered engines. We have no way to determine if these engines have been inspected and are therefore including these engines in the applicability of this AD.

#### **Interim Action**

We consider this AD interim action. An investigation to determine the cause of the failure is on-going and we may consider additional rulemaking if final action is identified.

#### FAA's Justification and Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because the compliance time is less than the time required for public comment. In addition, all engine fan hubs must be inspected, and if needed, replaced before further flight. Therefore, we find good cause that notice and compliance for prior public comment are impracticable. In addition, for the reasons stated above, we find that good cause exists for making this amendment effective in less than 30 days.

#### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment. However, we invite you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under the ADDRESSES section. Include the docket number FAA-2018-0564 and Product Identifier 2018-NE-23-AD at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this final rule. We will consider all comments received by the closing date and may amend this final rule because of those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this final rule.

#### **Costs of Compliance**

We estimate that this AD affects 14 engines installed on airplanes of U.S. registry. We estimate the following costs to comply with this AD:

# **Estimated costs**

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Visual inspection	2 work-hours X \$85 per hour = \$170	\$0	\$170	\$2,380

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs" describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to engines, propellers, and associated appliances to the Manager, Engine and Propeller Standards Branch, Policy and Innovation Division.

#### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
  - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

## § 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2018-13-03 International Aero Engines**: Amendment 39-19315; Docket No. FAA-2018-0564; Product Identifier 2018-NE-23-AD.

## (a) Effective Date

This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### (b) Affected ADs

None.

## (c) Applicability

This AD applies to International Aero Engines (IAE) PW1133G-JM, PW1133GA-JM, PW1130G-JM, PW1127G-JM, PW1127GA-JM, PW1127G1-JM, PW1124G-JM, PW1124G1-JM, and PW1122G-JM turbofan engines with serial numbers (S/Ns) up to and including S/N 770735.

## (d) Subject

Joint Aircraft System Component (JASC) Code 7230, Turbine Engine Compressor Section.

## (e) Unsafe Condition

This AD was prompted by reports of damage to the engine fan hub. We are issuing this AD to detect defects, damage, and cracks that could result in an uncontained failure of the engine fan hub. The unsafe condition, if not addressed, could result in uncontained failure of the engine fan hub, damage to the engine, and damage to the airplane.

## (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

# (g) Required Actions

Within 90 days after the effective date of this AD:

- (1) For engines installed on an airplane, perform a visual inspection of the engine fan hub, in accordance with the Accomplishment Instructions, paragraphs 1.E.(1) to 1.E.(4), of Pratt & Whitney (PW) Service Bulletin (SB) PW1000G-C-72-00-0104-00A-930A-D, Issue No. 002, dated May 31, 2018.
- (2) For engines not installed on an airplane, perform a visual inspection of the engine fan hub, in accordance with the Accomplishment Instructions, paragraphs 2.D.(1) to 2.D.(4), of PW SB PW1000G-C-72-00-0104-00A-930A-D, Issue No. 002, dated May 31, 2018.
- (3) If the engine fan hub visual inspection reveals defects or damage to the engine fan hub that are found outside the serviceable limits specified in Table 3 in the Accomplishment Instructions of PW SB PW1000G-C-72-00-0104-00A-930A-D, Issue No. 002, dated May 31, 2018, remove the engine fan hub from service and replace with a part that is eligible for installation, prior to further flight.

#### (h) Credit for Previous Actions

You may take credit for the inspection required by paragraph (g) of this AD if you performed the inspection before the effective date of this AD using PW SB PW1000G-C-72-00-0104-00A-930A-D, Original Issue, dated May 21, 2018.

### (i) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j) of this AD. You may email your request to: ANE-AD-AMOC@faa.gov.
- (2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

#### (j) Related Information

For more information about this AD, contact Kevin M. Clark, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7088; fax: 781-238-7199; email: kevin.m.clark@faa.gov.

#### (k) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
- (i) Pratt & Whitney Service Bulletin PW1000G-C-72-00-0104-00A-930A-D, Issue No. 002, dated May 31, 2018.

(ii) Reserved.

(3) For International Aero Engines service information identified in this AD,

contact International Aero Engines, 400 Main Street, East Hartford, CT 06118; phone:

800-565-0140; email: help24@pw.utc.com; internet: http://fleetcare.pw.utc.com.

(4) You may view this service information at FAA, Engine and Propeller

Standards Branch, 1200 District Avenue, Burlington, MA. For information on the

availability of this material at the FAA, call 781-238-7759.

(5) You may view this service information that is incorporated by reference at the

National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Burlington, Massachusetts, on June 19, 2018.

Robert J. Ganley,

Manager, Engine and Propeller Standards Branch,

Aircraft Certification Service.

[FR Doc. 2018-13639 Filed: 6/25/2018 8:45 am; Publication Date: 6/26/2018]

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